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REMARKS

Reconsideration is requested in view of the following remarks. Claims 1-16 remain pending in the application. Claims 14-16 are withdrawn. Applicants note that the Office Action Summary Sheet lists only claims 1-13, rather than claims 1-16, as pending.

Claim Rejections – 35 USC § 103

Claims 1-13 are rejected under 35 USC § 103(a) as being unpatentable over Esmond (US 3,827,562). Applicants respectfully traverse this rejection.

Claim 1 requires a plurality of holding ribs that extend inwardly from a wall of a filter retaining portion. In one example as shown in Fig. 4A-C, a blood filter device 1 includes a plurality of holding ribs 10 that extend inwardly from a wall 3a of a filter retaining portion 3 (see, e.g., page 14, lines 8-13 of the present specification, among other places). The plurality of holding ribs help maintain the pleats of the filter in place without obstructing air bubbles from being released from a filter surface and without causing additional resistance to a blood flow, which may as a result cause an additional loss of a blood flow pressure (see, e.g., page 9, lines 7-10 of the present specification, among other places).

Esmond fails to teach or suggest the holding ribs that extend inwardly from a wall of a filter retaining portion, as required by claim 1. In fact, Esmond discusses a filter element 65 formed of an elongated strip of filter cloth 66 with a support 67 in the form of a coarse mesh being formed within each of pleats of the filter cloth 66 (see Esmond, Figs. 8-10). Each support 67 in Esmond has the fold thereof internested within a corresponding fold in the filter cloth 66 (see Esmond, col. 4, line 66 to col. 5, line 3 and Fig. 10). Nowhere does Esmond teach or suggest the holding ribs that extend inwardly from a wall of a filter retaining portion as required by claim 1.

The rejection refers to the support 67 as suggesting the holding ribs of claim 1. However, each support 67 in Esmond in fact is formed within each of pleats of the filter cloth 66 and has the fold thereof internested within the corresponding fold in the filter

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cloth 66. This is completely distinct from the holding ribs which extend inwardly from a wall of a filter retaining portion as required by claim 1.

Moreover, the present record provides no teaching or suggestion that would lead one skilled in the art to modify the support 67 to arrive at the present holding ribs, much less any reason to expect that the advantages enjoyed by the present invention, helping maintain the pleats in place without obstructing air bubbles from being easily released from a filter surface and without causing additional resistance to a blood flow, could be achieved. In fact, the support 67 in Esmond covers at least a major surface of each pleat and would tend to obstruct air bubbles from being released from a surface of the filter element 65 and cause additional resistance to a blood flow.

For at least these reasons, claim 1 is patentable over Esmond. Claims 2-13 depend ultimately from claim 1 and are patentable along with claim 1 and need not be separately distinguished at this time. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

Claims 1-13 are rejected under 35 USC § 103(a) as being unpatentable over Graus (US 6,143,174), Haworth et al. (US 5,651,765) and Esmond (US 3,827,562). Applicants respectfully traverse this rejection.

Claim 1 is patentable over Graus, Haworth et al. and Esmond for reasons similar to those discussed above. Claim 1 requires a plurality of holding ribs that extend inwardly from a wall of a filter retaining portion. Claim 1 further requires that the plurality of holding ribs be provided at positions corresponding to end portions of respective pleats, whereby the holding ribs are inserted in the end portions of the pleats, respectively.

Graus fails to discuss holding ribs that extend inwardly from a wall of a filter retaining portion as required by claim 1. Instead, Graus merely discuss spacers positioned between pleat folds of a filter element, where the spacers on an inflow side of the filter element have a wider mesh or coarser pores than those on an outflow side (see Graus, col. 2, lines 45-52). In fact, similar to the support 67 in Esmond, the spacer in Graus appears to include mesh or coarser pores and to be positioned between pleat folds

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of a filter element. For reasons similar to those discussed above with respect to Esmond, the spacers in Graus are completely distinct from the holding ribs that extend inwardly from a wall of a filter retaining portion as required by claim 1.

Nor do Graus teach or suggest that the plurality of holding ribs are provided at positions corresponding to end portions of respective pleats, whereby the holding ribs are inserted in the end portions of the pleats, respectively, as required by claim 1. Instead, Fig. 1 and col. 3, lines 18-32 of Graus merely discuss that peripheral edges 12 of pleated filter element 2 are adjacent cylindrical housing walls 13 and 13', and are joined to the walls in fluid-tight fashion by means of sealing compound 14. Graus is completely silent as to a plurality of holding ribs that are provided at positions corresponding to end portions of respective pleats, whereby the holding ribs are inserted in the end portions of the pleats, respectively, as required by claim 1.

Haworth et al. and Esmond do not remedy the deficiencies of Graus. For at least these reasons, claim 1 is patentable over Graus, Haworth et al. and Esmond. Claims 2-13 depend ultimately from claim 1 and are patentable along with claim 1 and need not be separately distinguished at this time. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claims.

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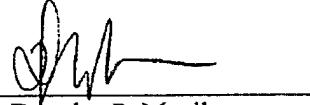
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In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.

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